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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,504	11/30/2001	Ken Dubuc	1400.1373460	6543

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EXAMINER

WONG, BLANCHE

ART UNIT	PAPER NUMBER
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2667

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,504

Applicant(s)

DUBUC ET AL.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,10,11,18,19,21,26 and 28 is/are rejected.
- 7) ☒ Claim(s) 2-9,12-17,20,22-25,27 and 29-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because drawing elements in Fig. 1-4 need descriptive labels and misspellings in Fig. 5 need correction.
 - In Fig. 1-4, Examiner suggests spelling out abbreviation not obvious to a person of ordinary skill in the art, such as DS, SI and TI, but obviously important to the invention, in order to increase legibility.
 - In Fig. 5, value is misspelled in 509,510,511.

Specification

2. The disclosure is objected to because of the following informalities: On p. 4, Examiner suggests adding the word “present” before invention in Fig. 3, in consistent with descriptions of Fig. 1,2,4.

Appropriate correction is required.

Claim Objections

3. Claim 5 is objected to because of the following informalities:
 - With regard to cl. 19, Examiner suggest replacing – operably – with “operatively” in ln. 5.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1,10,11,18,19,21,26,28** are rejected under 35 U.S.C. 102(e) as being clear anticipated by Matthews et al. (U.S. Pat No. 6,584,122).

With regard to cl. 1, Matthews discloses (Fig. 12, the flow of a switch packet) a service interface (input port interface, col. 20, ln. 23) for receiving the data packets (“... receipt 401 of a packet from an input ... function module ...”, col. 19, ln. 46), the data packets (Fig. 7 is switch packet format) including a differentiated service code point field 176 (two-byte length/priority field, col. 12, ln. 24) having a plurality of differentiated service codepoint values (00,01,10,11 in Table 3) (“three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than low-priority data, and low priority data...a fourth priority: management and configuration information ... has the highest priority ...”, col. 12, ln. 27-37);

a differentiated service profile 403 (lookup in Fig. 12, col. 20, ln. 9) associated with the service interface (input port interface);

a plurality of transport interfaces (output port interface, col. 20, ln. 25) operatively coupled to the service interface (input port interface), the service interface assigning a first data packet having a first differentiated service codepoint value to a first transport interface according to the differentiated service profile ("An inbound packet from a function module is received 401 ... and placed in a rate-matching FIFO buffer 402 ... The packet also contains information that specifies the priority of the packet ... The switch packet is placed on the appropriate priority queue for the appropriate port. ... The packet is read from the queue into an outbound rate-matching FIFO buffer 405, and output 406 ...", col. 20, ln. 1-25).

With regard to cl. 10, Matthews discloses

receiving the data packets ("... receipt 401 of a packet from an input ... function module ...", col. 19, ln. 46) at a service interface (input port interface, col. 20, ln. 23);

assigning classes of service ("three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than low-priority data, and low priority data... a fourth priority: management and configuration information ... has the highest priority ...", col. 12, ln. 27-37) associated with the data packets according to a differentiated service profile 403 (lookup in Fig. 12, col. 20, ln. 9) based on differentiated service codepoint values (00,01,10,11 in Table 3);

routing packets to transport interfaces (output port interface, col. 20, ln. 25) associated with the classes of service ("An inbound packet from a function module is

received 401 ... and placed in a rate-matching FIFO buffer 402 ... The packet also contains information that specifies the priority of the packet ... The switch packet is placed on the appropriate priority queue for the appropriate port. ... The packet is read from the queue into an outbound rate-matching FIFO buffer 405, and output 406 ...", col. 20, ln. 1-25).

With regard to cl. 11, Matthews further discloses routing packets according to destination addresses 172 (one byte destination address in Fig. 7, col. 20, ln. 8) associated with the packets (Fig. 7 is a switch packet format).

With regard to cl. 18, Matthews further discloses each of the transport interfaces is associated with exactly one of the classes of service (each queue to a buffer to an output) (" ... The switch packet is placed on the appropriate priority queue for the appropriate port. ... The packet is read from the queue into an outbound rate-matching FIFO buffer 405, and output 406 ...", col. 20, ln. 1-25).

With regard to cl. 19, Matthews discloses
a service interface (input port interface, col. 20, ln. 23) for carrying the data packets, wherein the data packets have a plurality of the classes of service ("three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than

low-priority data, and low priority data...a fourth priority: management and configuration information ... has the highest priority ...”, col. 12, ln. 27-37) (See also Table 3);

transport interfaces (output port interface, col. 20, ln. 25) operatively coupled to the service interface (input port interface, col. 20, ln. 23), the transport interfaces carrying subsets of the data packets wherein the classes of service of the subsets of the data packets carried by the transport interfaces are unique (each queue to a buffer to an output) (“ ... The switch packet is placed on the appropriate priority queue for the appropriate port. ... The packet is read from the queue into an outbound rate-matching FIFO buffer 405, and output 406 ...”, col. 20, ln. 1-25) to each of the transport interfaces.

With regard to cl. 21, Matthews further discloses

a differentiated service profile 403 (lookup in Fig. 12, col. 20, ln. 9) associated with the service interface (input port interface, col. 20, ln. 23), the differentiated service profile defining a correspondence (see Table 3) of differentiated service codepoint values (00,01,10,11) to the classes of service (“three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than low-priority data, and low priority data...a fourth priority: management and configuration information ... has the highest priority ...”, col. 12, ln. 27-37).

With regard to cl. 26, Matthews discloses

carrying data packets having a plurality of the classes of service (“three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than low-priority data, and low priority data...a fourth priority: management and configuration information ... has the highest priority ...”, col. 12, ln. 27-37) over a service interface (input port interface, col. 20, ln. 23);

carrying the data packets over transport interfaces (output port interface, col. 20, ln. 25), the transport interfaces carrying subsets of the data packets wherein the classes of service of the subsets of the subsets of the data packets carried by the transport interfaces are unique (each queue to a buffer to an output) (“ ... The switch packet is placed on the appropriate priority queue for the appropriate port. ... The packet is read from the queue into an outbound rate-matching FIFO buffer 405, and output 406 ...”, col. 20, ln. 1-25) to each of the transport interfaces.

With regard to cl. 28, Matthews further discloses

mapping (see Table 3) differentiated service codepoint values (00,01,10,11) to the classes of service (“three priorities of packets: voice and other data that must be communicated in real-time; high-priority data, which lower priority than the voice (real-time) data, but higher priority than low-priority data, and low priority data...a fourth priority: management and configuration information ... has the highest priority ...”, col. 12, ln. 27-37).

Allowable Subject Matter

6. Claim 2-9,12-17,20,22-25,27,29-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

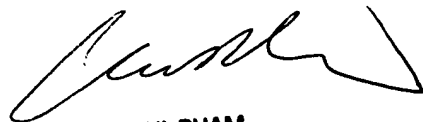
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RW

BW
February 3, 2006


CHI PHAM
PERMISSORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 2/6/06